California's Aging Power Plant Study
Draft Report Review

California Energy Commission Workshop
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Overall View of CEC's Draft Report

- We appreciate the CEC's study effort and are in agreement with many of the draft report findings. In particular, the CEC's draft report clearly presents the importance of California's aging power plants.
  - We agree that the reliability risks associated with retirements should not be underestimated.
  - We also agree that well over 8,000 MW of California's aging power plants are at a higher risk of retirement at present because of limited opportunities to participate in markets or obtain contracts.
- The CEC's draft report also finds that not all of California's aging power plants are "dirty".
  - For example, the aging power plants that have been retrofitted with emissions control technologies have emission rates per therm of gas burned essentially identical to those of newer combined-cycle plants.
- Accordingly, we believe the value and reliability benefit of California's aging power plants should not be understated in the CEC's report.
- We plan to submit written comments on the draft report, in addition to the comments provided in today's workshop, and wish to highlight two important areas:
  - Alternatives to aging power plants; and
  - Retirement risks related to the current market design.

Alternatives to Aging Power Plants

- The CEC report states that the capacity that may be lost due to aging plant retirements will likely be replaced by a variety of sources, including:
  - Demand-side management;
  - New renewable energy projects;
  - Increased generation at existing power plants;
  - New power plants; or
  - Transmission upgrades
- However, the CEC report should better clarify that few of these alternatives can be deployed within the study period (2004-2008):
  - On a megawatt scale equivalent to the size of aging plants that are subject to high or medium risk of retirement;
  - In the locations required to maintain local area reliability;
  - With equivalent flexibility of capacity commitment and energy dispatch; and
  - At an all-in equivalent cost of capacity and energy.

Retirement Risks Related to Market Design

- Many complex factors influence retirement decisions, not the least of which are regulatory uncertainty and an unstable market design that, if left unchanged, will persist until at least the year 2007.
- There are problems with the current market design that must be addressed now to comprehensively address the reliability risks associated with retirement, including:
  - Must-offer waiver denial
  - RMR selection criteria
  - Condition 2 RMR commitment and dispatch
  - Hardwired mitigation procedures
  - Ineffective commitment to resource adequacy
- We recommend that the problems with the current market design be explicitly identified and emphasized in the CEC's report as increasing the risks of retirement.

Problems with the Current Market Design – Explanatory Notes

- Must-offer waiver denial
  - Lack of compensation for, or some other form of contribution to, fixed cost recovery (i.e., obligating capacity to be available without compensation)
  - Upcoming Phase 1B changes will make the MOWD process even less compensatory unless there is a change in course
- RMR selection criteria
  - CAISO LARS; versus
  - CAISO/SCE July 26 advice letter; and
  - CEC draft report that identifies aging power plants required for local area and regional reliability
- Condition 2 RMR commitment and dispatch
  - The mandatory bidding requirement is selectively applied by the CAISO
  - CAISO uses mandatory bids from RMR capacity to replace Day-Ahead market-based bids at its discretion
- Hardwired mitigation procedures
  - Don't fit current market design (i.e., in absence of capacity market)
  - Don't reflect changes in market conditions (e.g., AMP=$91.87)
- Ineffective commitment to resource adequacy
  - Only a fractional compliance showing of contracted capacity will be required (i.e., we may not be resource adequate in 2006 or 2008);
  - Compliance showings may only occur 6-7 months ahead of the summer season (if there's a shortage identified, there's little time to react and insufficient time to build new generation or dispatchable load)
  - Little or no evidence of regulatory support for the development of a robust forward capacity market